

Notice of Allowability

Application No.

09/638,151

Examiner

Phuong Phu

Applicant(s)

PENDERGRASS ET AL.

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 8/5/05.
2. ☒ The allowed claim(s) is/are 2-4, 17-21, 24-28, 31-33, 46-50 and 53-57.
3. ☒ The drawings filed on 15 August 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 9/29/00
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

REASONS FOR ALLOWANCE

1. This Office Action is responsive to the Amendment filed on 8/5/05.
2. Claims 2-4, 17-21, 24-28, 31-33, 46-50 and 53-57 are allowed.
3. The following is an examiner's statement of reasons for allowance:

-Regarding to independent claim 2, none of prior art of record teaches or suggests a method as claimed. Li (6,331,997), (previously cited) teaches the method except that he fails to teach the limitation "allocating allowable and non-allowable characteristic regions relative to said at least one non-fixed reference; and applying the delta code relative to said allowable and non-allowable characteristic regions". It would not have been obvious for one skilled in the art to implement Li in view of other prior art of record for leading such the implementation to the claimed invention.

-Regarding to independent claims 17 and 46, none of prior art of record teaches or suggests an invention as claimed. Li teaches the invention except that he fails to teach the limitation "the rational function employed in the Rational Congruential Sequential Delta Code generation methodology is of the form $f(x;a) = ax^n \bmod M$, where f is a function of variable x , M is an integer modulus, a is a parameter, with possible values of $1, 2, \dots, M-1$, and n is a nonzero integer". It would not have been obvious for one skilled in the art to implement Li in view of other prior art of record for leading such the implementation to the claimed invention.

-Regarding to independent claims 18 and 47, none of prior art of record teaches or suggests an invention as claimed. Li teaches the invention except that he fails to teach the limitation "the rational function employed in the Rational Congruential Sequential Delta Code generation methodology is of the form $f(x;a) = ax^{-1} \bmod M$, where f is a function of variable x ,

Art Unit: 2631

M is an integer modulus, a is a parameter, with possible values of 1, 2, ... M-1". It would not have been obvious for one skilled in the art to implement Li in view of other prior art of record for leading such the implementation to the claimed invention.

-Regarding to independent claims 19 and 48, none of prior art of record teaches or suggests an invention as claimed. Li teaches the invention except that he fails to teach the limitation "the rational function employed in the Rational Congruential Sequential Delta Code generation methodology is of the form $f(x;a) = ax \bmod M$, where f is a function of variable x, M is an integer modulus, a is a parameter, with possible values of 1, 2, ... M-1". It would not have been obvious for one skilled in the art to implement Li in view of other prior art of record for leading such the implementation to the claimed invention.

-Regarding to independent claims 20 and 49, none of prior art of record teaches or suggests an invention as claimed. Li teaches the invention except that he fails to teach the limitation "the rational function employed in the Rational Congruential Sequential Delta Code generation methodology is of the form $f(x;a) = ax^2 \bmod M$, where f is a function of variable x, M is an integer modulus, a is a parameter, with possible values of 1, 2, ... M-1". It would not have been obvious for one skilled in the art to implement Li in view of other prior art of record for leading such the implementation to the claimed invention.

-Regarding to independent claims 21 and 50, none of prior art of record teaches or suggests an invention as claimed. Li teaches the invention except that he fails to teach the limitation "the rational function employed in the Rational Congruential Sequential Delta Code generation methodology is of the form $f(x;a) = ax^3 \bmod M$, where f is a function of variable x, M is an integer modulus, a is a parameter, with possible values of 1, 2, ... M-1". It would not

Art Unit: 2631

have been obvious for one skilled in the art to implement Li in view of other prior art of record for leading such the implementation to the claimed invention.

-Regarding to independent claims 24 and 53, none of prior art of record teaches or suggests an invention as claimed. Li teaches the invention except that he fails to teach the limitation “the rational function employed in the Rational Congruential Iterative Delta Code generation methodology is of the form $f(x;a) = ax^n \bmod M$, where f is a function of variable x , M is an integer modulus, a is a parameter, with possible values of $1, 2, \dots, M-1$, and n is a nonzero integer”. It would not have been obvious for one skilled in the art to implement Li in view of other prior art of record for leading such the implementation to the claimed invention.

-Regarding to independent claims 25 and 54, none of prior art of record teaches or suggests an invention as claimed. Li teaches the invention except that he fails to teach the limitation “the rational function employed in the Rational Congruential Iterative Delta Code generation methodology is of the form $f(x;a) = ax^{-1} \bmod M$, where f is a function of variable x , M is an integer modulus, a is a parameter, with possible values of $1, 2, \dots, M-1$ ”. It would not have been obvious for one skilled in the art to implement Li in view of other prior art of record for leading such the implementation to the claimed invention.

-Regarding to independent claims 26 and 55, none of prior art of record teaches or suggests an invention as claimed. Li teaches the invention except that he fails to teach the limitation “the rational function employed in the Rational Congruential Iterative Delta Code generation methodology is of the form $f(x;a) = ax \bmod M$, where f is a function of variable x , M is an integer modulus, a is a parameter, with possible values of $1, 2, \dots, M-1$ ”. It would not have

Art Unit: 2631

been obvious for one skilled in the art to implement Li in view of other prior art of record for leading such the implementation to the claimed invention.

-Regarding to independent claims 27 and 56, none of prior art of record teaches or suggests an invention as claimed. Li teaches the invention except that he fails to teach the limitation "the rational function employed in the Rational Congruential Iterative Delta Code generation methodology is of the form $f(x;a) = ax^2 \bmod M$, where f is a function of variable x, M is an integer modulus, a is a parameter, with possible values of 1, 2, ... M-1". It would not have been obvious for one skilled in the art to implement Li in view of other prior art of record for leading such the implementation to the claimed invention.

-Regarding to independent claims 28 and 57, none of prior art of record teaches or suggests an invention as claimed. Li teaches the invention except that he fails to teach the limitation "the rational function employed in the Rational Congruential Iterative Delta Code generation methodology is of the form $f(x;a) = ax^3 \bmod M$, where f is a function of variable x, M is an integer modulus, a is a parameter, with possible values of 1, 2, ... M-1". It would not have been obvious for one skilled in the art to implement Li in view of other prior art of record for leading such the implementation to the claimed invention.

-Regarding to independent claim 31, none of prior art of record teaches or suggests a system as claimed. Li teaches the system except that he fails to teach the limitation "allowable and non-allowable characteristic regions are allocated relative to said at least one non-fixed reference and said delta code is applied relative to said allowable and non-allowable characteristic regions". It would not have been obvious for one skilled in the art to implement Li in view of other prior art of record for leading such the implementation to the claimed invention.

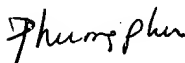
Art Unit: 2631

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (6:30-2:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Phuong Phu
08/17/2005

PHUONG PHU
PRIMARY EXAMINER

Phuong Phu
Primary Examiner
Art Unit 2631